identified as Stylosanthes hamatus, of which there is no published report from Gujarat. A brief description and illustration follows.

Stylosanthes hamatus (Linn.) Taub. in Verh. Bot Brand 32: 22, 1980

Syn. S. mucronata Willd., Sp. Pl. 3: 1166, 1802; Beddome, Icon., Pl. Ind. Orient. t. 294, 1871; Baker in Hook. f., Fl. Brit. Ind. 2: 148, 1876; Cooke, Fl. Pres. Bombay 1: 356, 1903; Talbot, Trees Bombay 69, 1902. S. fruticosa (Retz.) Alston in Trimen., Handb. Fl. Ceylon 6 suppl. 77, 1931; Nooteboom in Reinwardtia 5: 449, 1961; Verdcort in Kew Bull. 24: 59, 1970. Arachis fruticosa Retz, Obs. Bot. 5: 26, 1788. Hedysarum hamatus (Linn.) Taub., Syst. Veg. Ed. 10, 1170, 1759 (pro parte, pro typus); Burm. F., Fl. Ind. 167, 1768.

A much branched, low, diffuse, perennial undershrub. Branches terete, stiff, ascending, more or less hairy. Leaves trifoliate, stipules scarious, strongly nerved, adnate to the petiole for half their length, terminating above in 2 spreading teeth. Leaflet $10-18 \mathrm{~mm}$ long, ellipticoblong 4 by 20 mm , or lanceolate, coriaceous,
pale green, pubescent on lower surface. Terminal leaflet a little larger than lateral ones, all acute and mucronate at the apex, glabrous above, slightly pubescent, strongly nerved, base subacute; lateral leaflets subsessile, the terminal with a petiole about $4-5 \mathrm{~mm}$ long. Flowers solitary or few in sessile terminal heads in the axils of leaf-like stipulate bracts. Bracts persistent, striated, pubescent. Calyx tubular; tube filiform 4-6 mm long, membranous, the upper connate lobes ciliate at the apex. Corolla yellowish-orange 7-9 mm long. Pods flattened, 10-15 mm long, l-2 jointed, very short, concealed by the persistent bracts, hooked at the apex with the persistent base of the style, joints pubescent with raised veins.

Fl \& Fr.: September-February
Present status: Rare
Specimen examined: PSN 221

April 22, 2000

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## 42. UNUSUAL NUMBER OF CARPELS AND FERTILE STAMENS IN FLOWERS OF BAUHINIA VARIEGATA L., LEGUMINOSAE: CAESALPINIOIDEAE

## (With one text-figure)

My earlier observation on the unusual occurrence of two free carpels in the flowers of Bauhinia variegata L . in a collection from Myanmar was included in the publication of Larsen and Larsen in Fl. Males. 12(2): 414. 1996.

Recently, I have again come across a flower of $B$. variegata with two free carpels. The flower was found lying on the ground below a tree of this species on the Prain mound in Division 16 of the Indian Botanic Garden, Howrah. This is the third of six trees of B. variegata, counted anti-clockwise from that of a B. racemosa Lam.
tree on the margin of the circular mound.
In the flower observed, the two free carpels are normal in size, whereas in the collection from Myanmar (Sittang, 8.ii.1905, Coll. ?, herb. acc. no. 137613 - CAL), one flower has two free carpels of normal size and the other two flowers have a normal and a reduced size carpel.

It may be mentioned here that after collecting the flower with two free carpels, I have examined a number of flowers from all the six trees, but all of them either have normal or reduced size carpel.


Fig. 1: Bauhinia variegata L.: a. Normal and reduced size carpel. - After herb. acc. no. 137613;
b. two free carpels of normal size, - After Bandyopadhyay 103. $($ Scale $=1 \mathrm{~cm})$.

When I was writing this communication, Dr. P.R. Sur kindly drew my attention to a flower of B. variegata from his garden at Aakra, Santoshpur, which had not only two free carpels but also ten petals and ten fertile stamens. Moreover, I observed that the spathaceous calyx
was shortly bilobed at its apex and each half was made up of five sepals. It seemed to me that two flowers had somehow joined together.

While examining the flower with two free carpels, gathered from the Prain mound, I also observed seven fertile stamens and later found that some of the flowers from the third, fifth and sixth trees in the aforesaid sequence, have four, six or seven fertile stamens. There were also flowers with the usual five stamens. Furthermore, some of the flowers, irrespective of the number of fertile stamens, had two to five staminodes and a reduced stamen of varying size. This interesting variation in the number of fertile stamens and the presence of a reduced stamen has not been recorded earlier in B. variegata.

The flowers on all the six trees are reddishpurple and the fertilized ovules develop into wellformed seeds.

The voucher specimens (3.iii.2000, Bandyopadhya 103; 14.iii.2000, Bandyopadhyay 104; 6.iii.2000, Sur s.n.) have been deposited in CAL.

June 26, 2000
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## 43. ACTINOSTEMMA TENERUM GRIFF., CUCURBITACEAE, A NEW PHYTOGEOGRAPHIC RECORD FROM ALIGARH, UTTAR PRADESH

Actinostemma Griff. is a small genus consisting of seven species confined to China (Chakravarty 1959). A. tenerum Griff. is the sole representative of this genus in India, with a limited distribution in Assam, Bengal and western Himalayas, and Bahraich, Kheri and Pilibhit in Uttar Pradesh. The above mentioned places in Uttar Pradesh are situated in the terai region and are characterized by humid climate and humus-rich loam soil. The species was recently collected from Aligarh ( $27^{\circ} 29^{\prime}-28^{\circ}$ $11^{\prime} \mathrm{N}, 77^{\circ} 29^{\prime}-78^{\circ} 38^{\prime} \mathrm{E}$ ). Since this taxon has
never been reported from any locality in Uttar Pradesh, except those mentioned above, its occurrence in Aligarh is being reported as a new distributional record.

Actinostemma tenerum Griff. Pl. Cantor. 24.T.3. 1837; Clarke in Hook. f., Fl. Brit. Ind. II 633 (excl. syn.) 1879; Duthie, Fl. Upp. Gang. Pl. I, 3821969 (Repr edn); Chakravarty, Monograph on Indian Cucurbitaceae, 180, 1939.

An extensive climber with slender, obtusely five-angled branches; younger parts, petiole base and nodes pilose with gland-tipped hairs, tendrils

